



SEQUENCE LISTING

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Heinrikson, Robert L.

<120> SUBSTRATES AND ASSAYS FOR BETA-SECRETASE ACTIVITY

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<140> 10/801,486

<141> 2004-03-16

<150> 09/908,943

<151> 2001-07-19

<150> 60/219,795

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<170> PatentIn Ver. 2.0

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Val Gly Ser Pro Pro Gln Thr Leu Asn Ile Leu Val Asp Thr Gly Ser
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Glu Glu Pro Glu Glu Pro Gly Arg Arg Gly Ser Phe Val Glu Met Val
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Asp Asn Leu Arg Gly Lys Ser Gly Gln Gly Tyr Tyr Val Glu Met Thr
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Val Gly Ser Pro Pro Gln Thr Leu Asn Ile Leu Val Asp Thr Gly Ser
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Ser Asn Phe Ala Val Gly Ala Ala Pro His Pro Phe Leu His Arg Tyr
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Tyr Val Pro Tyr Thr Gln Gly Lys Trp Glu Gly Glu Leu Gly Thr Asp
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<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: synthetic
peptide sequence

<400> 38
Gly Val Leu Leu Ser Arg Lys
1 5

<210> 39
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: synthetic
peptide sequence

<400> 39
Val Gly Ser Gly Val Leu Leu
1 5

<210> 40
<211> 5
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: synthetic
peptide sequence

<400> 40
Val Gly Ser Gly Val
1 5

<210> 41
<211> 12
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: synthetic
peptide sequence

<220>
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<223> Xaa= cysteic acid

<400> 41
Lys Val Glu Ala Leu Tyr Leu Val Xaa Gly Glu Arg
1 5 10

<210> 42
<211> 15
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: synthetic
peptide sequence

<400> 42
Trp Arg Arg Val Glu Ala Leu Tyr Leu Val Glu Gly Glu Arg Lys
1 5 10 15

<210> 43
<211> 14

<212> PRT
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: synthetic
 peptide sequence

 <400> 43
 Lys Val Glu Ala Asn Tyr Leu Val Glu Gly Glu Arg Lys Lys
 1 5 10

 <210> 44
 <211> 4
 <212> PRT
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: synthetic
 peptide sequence

 <400> 44
 Met Leu Leu Leu
 1

 <210> 45
 <211> 6
 <212> PRT
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: synthetic
 peptide sequence

 <400> 45
 Asp Ala Ala His Pro Gly
 1 5

 <210> 46
 <211> 14
 <212> PRT
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: synthetic
 peptide sequence

 <400> 46
 Lys Val Glu Ala Asn Tyr Asp Val Glu Gly Glu Arg Lys Lys
 1 5 10

 <210> 47
 <211> 14
 <212> PRT
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: synthetic
 peptide sequence

<400> 47
Lys Val Glu Ala Asn Leu Ala Val Glu Gly Glu Arg Lys Lys
1 5 10

<210> 48
<211> 14
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: synthetic
peptide sequence

<400> 48
Lys Val Glu Ala Leu Tyr Ala Val Glu Gly Glu Arg Lys Lys
1 5 10

<210> 49
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: synthetic
peptide sequence

<220>
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<222> (1)
<223> Xaa = E, G, I, D, T, cysteic acid or S

<400> 49
Xaa Ala Asn Tyr Glu Val Glu Phe
1 5

<210> 50
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: synthetic
peptide sequence

<220>
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<222> (2)
<223> Xaa= A, V, I, S, H, Y, T or F

<400> 50
Glu Xaa Asn Tyr Glu Val Glu Phe
1 5

<210> 51
<211> 8
<212> PRT
<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide sequence

<220>

<221> SITE

<222> (3)

<223> Xaa= N, L, K, S, G, T, D, A, Q, or E

<400> 51

Glu Ala Xaa Tyr Glu Val Glu Phe
1 5

<210> 52

<211> 8

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide sequence

<220>

<221> SITE

<222> (4)

<223> Xaa= Y, L, M, Nle, F or H

<400> 52

Glu Ala Asn Xaa Glu Val Glu Phe
1 5

<210> 53

<211> 8

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide sequence

<220>

<221> SITE

<222> (5)

<223> Xaa= E, A, D, M, Q, S or G

<400> 53

Glu Ala Asn Tyr Xaa Val Glu Phe
1 5

<210> 54

<211> 8

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide sequence

<220>

<221> SITE

<222> (6)

<223> Xaa= V, A, N, T, L, F or S

<400> 54

Glu Ala Asn Tyr Glu Xaa Glu Phe
1 5

<210> 55

<211> 8

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic
peptide sequence

<220>

<221> SITE

<222> (7)

<223> Xaa= E, G, F, H, cysteic acid or S

<400> 55

Glu Ala Asn Tyr Glu Val Xaa Phe
1 5

<210> 56

<211> 8

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic
peptide sequence

<220>

<221> SITE

<222> (8)

<223> Xaa= F, W, G, A, H, P, G, N, S or E

<400> 56

Glu Ala Asn Tyr Glu Val Glu Xaa
1 5

<210> 57

<211> 8

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic
peptide sequence

<220>

<221> SITE

<222> (1)

<223> Xaa= E, G, I, D, T, cyeteic acid or S

<400> 57

Xaa Val Leu Leu Ala Ala Gly Trp
1 5

<210> 58
 <211> 8
 <212> PRT
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: synthetic
 peptide sequence

 <220>
 <221> SITE
 <222> (2)
 <223> Xaa= A, V, I, S, H, Y, T or F

 <400> 58
 Gly Xaa Leu Leu Ala Ala Gly Trp
 1 5

<210> 59
 <211> 8
 <212> PRT
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: synthetic
 peptide sequence

 <220>
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 <222> (3)
 <223> Xaa= N, L, K, S, G, T, D, A, Q or E

 <400> 59
 Gly Val Xaa Leu Ala Ala Gly Trp
 1 5

<210> 60
 <211> 8
 <212> PRT
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: synthetic
 peptide sequence

 <220>
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 <222> (4)
 <223> Xaa= Y, L, M, Nle, F or H

 <400> 60
 Gly Val Leu Xaa Ala Ala Gly Trp
 1 5

<210> 61
 <211> 8
 <212> PRT
 <213> Artificial Sequence

 <220>

<223> Description of Artificial Sequence: synthetic peptide sequence

<220>

<221> SITE

<222> (5)

<223> Xaa= E, A, D, M, Q, S or G

<400> 61

Gly Val Leu Leu Xaa Ala Gly Trp
1 5

<210> 62

<211> 8

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide sequence

<220>

<221> SITE

<222> (6)

<223> Xaa= V, A, N, T, L, F or S

<400> 62

Gly Val Leu Leu Ala Xaa Gly Trp
1 5

<210> 63

<211> 8

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide sequence

<220>

<221> SITE

<222> (7)

<223> Xaa= E, G, F, H, cysteic acid or S

<400> 63

Gly Val Leu Leu Ala Ala Xaa Trp
1 5

<210> 64

<211> 8

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide sequence

<220>

<221> SITE

<222> (8)

<223> Xaa= F, W, G, A, H, P, G, N or S

<400> 64

Gly Val Leu Leu Ala Ala Gly Xaa
1 5

<210> 65

<211> 8

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic
peptide sequence

<220>

<221> SITE

<222> (1)

<223> Xaa= E, G, I, D, T, cysteic acid or S

<400> 65

Xaa Ile Lys Met Asp Asn Phe Gly
1 5

<210> 66

<211> 8

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic
peptide sequence

<220>

<221> SITE

<222> (2)

<223> Xaa= A, V, I, S, H, Y, T or F

<400> 66

Ile Xaa Lys Met Asp Asn Phe Gly
1 5

<210> 67

<211> 8

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic
peptide sequence

<220>

<221> SITE

<222> (3)

<223> Xaa= N, L, K, S, G, T, D, A, Q or E

<400> 67

Ile Ile Xaa Met Asp Asn Phe Gly
1 5

<210> 68
 <211> 8
 <212> PRT
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: synthetic
 peptide sequence

 <220>
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 <222> (4)
 <223> Xaa= Y, L, M, Nle, F or H

 <400> 68
 Ile Ile Lys Xaa Asp Asn Phe Gly
 1 5

 <210> 69
 <211> 8
 <212> PRT
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: synthetic
 peptide sequence

 <220>
 <221> SITE
 <222> (5)
 <223> Xaa= E, A, D, M, Q, S or G

 <400> 69

 Ile Ile Lys Met Xaa Asn Phe Gly
 1 5

 <210> 70
 <211> 8
 <212> PRT
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: synthetic
 peptide sequence

 <220>
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 <222> (6)
 <223> Xaa= V, A, N,T, L, F or S

 <400> 70
 Ile Ile Lys Met Asp Xaa Phe Gly
 1 5

 <210> 71
 <211> 8
 <212> PRT
 <213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: synthetic
peptide sequence

<220>
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<222> (7)
<223> Xaa= E, G, F, H, cysteic acid or S

<400> 71
Ile Ile Lys Met Asp Asn Xaa Gly
1 5

<210> 72
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: synthetic
peptide sequence

<220>
<221> SITE
<222> (8)
<223> Xaa= F, W, G, A, H, P, G, N or S

<400> 72
Ile Ile Lys Met Asp Asn Phe Xaa
1 5

<210> 73
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: synthetic
peptide sequence

<220>
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<222> (1)
<223> Xaa= E, G, I, D, T, cysteic acid or S

<400> 73
Xaa Ser Ser Asn Leu Glu Met Thr His Ala
1 5 10

<210> 74
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: synthetic
peptide sequence

<220>
<221> SITE

<222> (2)
 <223> Xaa= A, V, I, S, H, Y, T or F

 <400> 74
 Asp Xaa Ser Asn Leu Glu Met Thr His Ala
 1 5 10

 <210> 75
 <211> 10
 <212> PRT
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: synthetic
 peptide sequence

 <220>
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 <223> Xaa= N, L, K, S, G, T, D, A, Q or E

 <400> 75
 Asp Ser Xaa Asn Leu Glu Met Thr His Ala
 1 5 10

 <210> 76
 <211> 8
 <212> PRT
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: synthetic
 peptide sequence

 <220>
 <221> SITE
 <222> (4)
 <223> Xaa= Y, L, M, Nle, F or H

 <400> 76
 Asp Ser Ser Xaa Met Thr His Ala
 1 5

 <210> 77
 <211> 10
 <212> PRT
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: synthetic
 peptide sequence

 <220>
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 <222> (7)
 <223> Xaa= E, A, D, M, Q, S or G

 <400> 77
 Asp Ser Ser Asn Leu Glu Xaa Thr His Ala
 1 5 10

<210> 78
 <211> 10
 <212> PRT
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: synthetic
 peptide sequence

 <220>
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 <222> (8)
 <223> Xaa= V, A, N, T, L, F or S

 <400> 78
 Asp Ser Ser Asn Leu Glu Met Xaa His Ala
 1 5 10

 <210> 79
 <211> 9
 <212> PRT
 <213> Artificial Sequence

 <220>
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 peptide sequence

 <220>
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 <222> (8)
 <223> Xaa= E, G, F, H, cysteic acid or S

 <400> 79
 Asp Ser Asn Leu Glu Met Thr Xaa Ala
 1 5

 <210> 80
 <211> 9
 <212> PRT
 <213> Artificial Sequence

 <220>
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 peptide sequence

 <220>
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 <222> (9)
 <223> Xaa= F, W, G, A, H, P, G, N or S

 <400> 80
 Asp Ser Asn Leu Glu Met Thr His Xaa
 1 5

 <210> 81
 <211> 8
 <212> PRT
 <213> Artificial Sequence

<220>
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peptide sequence

<220>
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<222> (1)
<223> Xaa= E, G, I, D, T, cysteic acid or S

<220>
<221> SITE
<222> (7)
<223> Xaa= cysteic acid

<400> 81
Xaa His Gly Phe Gln Leu Xaa His
1 5

<210> 82
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: synthetic
peptide sequence

<220>
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<222> (2)
<223> Xaa= A, V, I, S, H, Y, T or F

<220>
<221> SITE
<222> (7)
<223> Xaa= cysteic acid

<400> 82
Thr Xaa Gly Phe Gln Leu Xaa His
1 5

<210> 83
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
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peptide sequence

<220>
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<222> (3)
<223> Xaa= N, L, K, S, G, T, D, A, Q or E

<220>
<221> SITE
<222> (7)
<223> Xaa= cysteic acid

<400> 83

Thr His Xaa Phe Gln Leu Xaa His
1 5

<210> 84
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
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peptide sequence

<220>
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<222> (4)
<223> Xaa= Y, L, M, Nle, F or H

<220>
<221> SITE
<222> (7)
<223> Xaa= cysteic acid

<400> 84
Thr His Gly Xaa Gln Leu Xaa His
1 5

<210> 85
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
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peptide sequence

<220>
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<222> (5)
<223> Xaa= E, A, D, M, Q, S or G

<220>
<221> SITE
<222> (7)
<223> Xaa= cysteic acid

<400> 85
Thr His Gly Phe Xaa Leu Xaa His
1 5

<210> 86
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: synthetic
peptide sequence

<220>
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<222> (6)
 <223> Xaa= V, A, N, T, L, F or S

 <220>
 <221> SITE
 <222> (7)
 <223> Xaa= cysteic acid

 <400> 86
 Thr His Gly Phe Gln Xaa Xaa His
 1 5

 <210> 87
 <211> 8
 <212> PRT
 <213> Artificial Sequence

 <220>
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 peptide sequence

 <220>
 <221> SITE
 <222> (7)
 <223> Xaa= E, G, F, H, cysteic acid or S

 <400> 87
 Thr His Gly Phe Gln Leu Xaa His
 1 5

 <210> 88
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 <212> PRT
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 <220>
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 peptide sequence

 <220>
 <221> SITE
 <222> (7)
 <223> Xaa= cysteic acid

 <220>
 <221> SITE
 <222> (8)
 <223> Xaa= F, W, G, A, H, P, G, N or S

 <400> 88
 Thr His Gly Phe Gln Leu Xaa Xaa
 1 5

 <210> 89
 <211> 8
 <212> PRT
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: synthetic

peptide sequence

<220>
<221> SITE
<222> (1)
<223> Xaa= E, G, I, D, T, cysteic acid or S

<400> 89
Xaa Tyr Thr His Ser Phe Ser Pro
1 5

<210> 90
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
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peptide sequence

<220>
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<222> (1)
<223> Xaa= cysteic acid

<220>
<221> SITE
<222> (2)
<223> Xaa= A, V, I, S, H, Y, T or F

<400> 90
Xaa Xaa Thr His Ser Phe Ser Pro
1 5

<210> 91
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
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peptide sequence

<220>
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<222> (1)
<223> Xaa= cysteic acid

<220>
<221> SITE
<222> (3)
<223> Xaa= N, L, K, S, G, T, D, A, Q or E

<400> 91
Xaa Tyr Xaa His Ser Phe Ser Pro
1 5

<210> 92
<211> 8
<212> PRT

<213> Artificial Sequence
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 peptide sequence
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 <222> (1)
 <223> Xaa= cysteic acid
 <220>
 <221> SITE
 <222> (4)
 <223> Xaa= Y, L, M, Nle, F or H
 <400> 92
 Xaa Tyr Thr Xaa Ser Phe Ser Pro
 1 5
 <210> 93
 <211> 8
 <212> PRT
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 peptide sequence
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 <223> Xaa= cysteic acid
 <220>
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 <222> (5)
 <223> Xaa= E, A, D, M, Q, S or G
 <400> 93
 Xaa Tyr Thr His Xaa Phe Ser Pro
 1 5
 <210> 94
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 peptide sequence
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 <223> Xaa= cysteic acid
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 <223> Xaa= V, A, N, T, L, F or S

<400> 94
Xaa Tyr Thr His Ser Xaa Ser Pro
1 5

<210> 95
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
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peptide sequence

<220>
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<223> Xaa= cysteic acid

<220>
<221> SITE
<222> (7)
<223> Xaa=E, G, F, H, cysteic acid or S

<400> 95
Xaa Tyr Thr His Ser Phe Xaa Pro
1 5

<210> 96
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
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peptide sequence

<220>
<221> SITE
<222> (1)
<223> Xaa=cysteic acid

<220>
<221> SITE
<222> (8)
<223> Xaa= F, W, G, A, H, P, G, N or S

<400> 96
Xaa Tyr Thr His Ser Phe Ser Xaa
1 5

<210> 97
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
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peptide sequence

<220>

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<223> Xaa= E, G, I, D, T, cysteic acid or S

<220>
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<222> (7)
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<222> (4)
<223> Xaa= any amino acid

<400> 97
Xaa Thr Asp Xaa Gly Ser Xaa Gly
1 5

<210> 98
<211> 8
<212> PRT
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<220>
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peptide sequence

<220>
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<222> (2)
<223> Xaa=A, V, I, S, H, Y, T or F

<220>
<221> SITE
<222> (4)
<223> Xaa= any amino acid

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<222> (7)
<223> Xaa= any amino acid

<400> 98
Ser Xaa Asp Xaa Gly Ser Xaa Gly
1 5

<210> 99
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
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peptide sequence

<220>
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<223> Xaa= N, L, K, S, G, T, D, A, Q or E

<220>

<221> SITE
<222> (4)
<223> Xaa= any amino acid

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<222> (7)
<223> Xaa= any amino acid

<400> 99
Ser Thr Xaa Xaa Gly Ser Xaa Gly
1 5

<210> 100
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peptide sequence

<220>
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<222> (4)
<223> Xaa= Y, L, M, Nle, F or H

<220>
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<222> (7)
<223> Xaa= any amino acid

<400> 100
Ser Thr Asp Xaa Gly Ser Xaa Gly
1 5

<210> 101
<211> 8
<212> PRT
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<220>
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peptide sequence

<220>
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<223> Xaa= any amino acid

<220>
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<223> Xaa= any amino acid

<220>
<221> SITE
<222> (5)
<223> Xaa= E, A, D, M, Q, S or G

<400> 101

Ser Thr Asp Xaa Xaa Ser Xaa Gly
1 5

<210> 102
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: synthetic
peptide sequence

<220>
<221> SITE
<222> (4)
<223> Xaa= any amino acid

<220>
<221> SITE
<222> (7)
<223> Xaa= any amino acid

<220>
<221> SITE
<222> (6)
<223> Xaa= V, A, N, T, L, F or S

<400> 102
Ser Thr Asp Xaa Gly Xaa Xaa Gly
1 5

<210> 103
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: synthetic
peptide sequence

<220>
<221> SITE
<222> (4)
<223> Xaa= any amino acid

<220>
<221> SITE
<222> (7)
<223> Xaa= E, G, F, H, cysteic acid or S

<400> 103
Ser Thr Asp Xaa Gly Ser Xaa Gly
1 5

<210> 104
<211> 8
<212> PRT
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<220>

<223> Description of Artificial Sequence: synthetic peptide sequence

<220>

<221> SITE

<222> (4)

<223> Xaa= any amino acid

<220>

<221> SITE

<222> (7)

<223> Xaa= any amino acid

<220>

<221> SITE

<222> (8)

<223> Xaa= F, W, G, A, H, P, G, N or S

<400> 104

Ser Thr Asp Xaa Gly Ser Xaa Xaa
1 5

<210> 105

<211> 8

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide sequence

<220>

<221> SITE

<222> (1)

<223> Xaa= E, G, I, D, T, cysteic acid or S

<220>

<221> SITE

<222> (4)..(7)

<223> Xaa= any amino acid

<400> 105

Xaa Phe Ala Xaa Xaa Xaa Xaa Asn
1 5

<210> 106

<211> 8

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic peptide sequence

<220>

<221> SITE

<222> (1)

<223> Xaa= any amino acid

<220>

<221> SITE
<222> (2)
<223> Xaa= A, V, I, S, H, Y, T or F

<220>
<221> SITE
<222> (4)..(7)
<223> Xaa= any amino acid

<400> 106
Xaa Xaa Ala Xaa Xaa Xaa Xaa Asn
1 5

<210> 107
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: synthetic
peptide sequence

<220>
<221> SITE
<222> (1)
<223> Xaa= any amino acid

<220>
<221> SITE
<222> (3)
<223> Xaa= N, L, K, S, G, T, D, A, Q or E

<220>
<221> SITE
<222> (4)..(7)
<223> Xaa= any amino acid

<400> 107
Xaa Phe Xaa Xaa Xaa Xaa Xaa Asn
1 5

<210> 108
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: synthetic
peptide sequence

<220>
<221> SITE
<222> (1)
<223> Xaa= any amino acid

<220>
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<222> (4)
<223> Xaa= Y, L, M, Nle, F or H

<220>

<221> SITE
<222> (5)..(7)
<223> Xaa= any amino acid

<400> 108
Xaa Phe Ala Xaa Xaa Xaa Xaa Asn
1 5

<210> 109
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: synthetic
peptide sequence

<220>
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<222> (1)
<223> Xaa= any amino acid

<220>
<221> SITE
<222> (4)
<223> Xaa = any amino acid

<220>
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<222> (5)
<223> Xaa= E, A, D, M, Q, S or G

<220>
<221> SITE
<222> (6)..(7)
<223> Xaa= any amino acid

<400> 109
Xaa Phe Ala Xaa Xaa Xaa Xaa Asn
1 5

<210> 110
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: synthetic
peptide sequence

<220>
<221> SITE
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<223> Xaa= any amino acid

<220>
<221> SITE
<222> (4)..(5)
<223> Xaa= any amino acid

<220>

<221> SITE
<222> (6)
<223> Xaa= V, A, N, T, L, F or S

<220>
<221> SITE
<222> (7)
<223> Xaa= any amino acid

<400> 110
Xaa Phe Ala Xaa Xaa Xaa Xaa Asn
1 5

<210> 111
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: synthetic
peptide sequence.

<220>
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<223> Xaa= any amino acid

<220>
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<222> (4)..(6)
<223> Xaa= any amino acid

<220>
<221> SITE
<222> (7)
<223> Xaa= E, G, F, H, cysteic acid or S

<400> 111
Xaa Phe Ala Xaa Xaa Xaa Xaa Asn
1 5

<210> 112
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: synthetic
peptide sequence

<220>
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<220>
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<223> Xaa= any amino acid

<220>

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<223> Xaa= F, W, G, A, H, P, G, N or S

<400> 112
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1 5

<210> 113
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: synthetic
peptide sequence

<400> 113
Glu Val Asn Leu Asp Ala Glu Phe Arg
1 5

<210> 114
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: synthetic
peptide sequence

<400> 114
Asp Tyr Lys Asp Asp Asp Lys
1 5

<210> 115
<211> 17
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: synthetic
peptide sequence

<400> 115
Ala Cys Gly Ser Glu Ser Met Asp Ser Gly Ile Ser Leu Asp Asn Lys
1 5 10 15

Trp

<210> 116
<211> 17
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: synthetic
peptide sequence

<400> 116
 Trp Lys Lys Gly Ala Ile Ile Gly Leu Met Val Gly Gly Val Val Lys
 1 5 10 15
 Lys

<210> 117
 <211> 11
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: synthetic
 peptide sequence

<400> 117
 Ala Asn Leu Ser Thr Phe Ala Gln Pro Arg Arg
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<210> 118
 <211> 22
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: synthetic
 peptide sequence

<400> 118
 Tyr Arg Tyr Gln Ser His Asp Tyr Ala Phe Ser Ser Val Glu Lys Leu
 1 5 10 15

Leu His Leu Gly Gly Cys
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<210> 119
 <211> 22
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: synthetic
 peptide sequence

<400> 119
 Tyr Arg Tyr Gln Ser His Asp Tyr Ala Phe Ser Ser Val Glu Lys Leu
 1 5 10 15

Leu His Leu Gly Gly Cys
 20

<210> 120
 <211> 10
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: synthetic

peptide sequence

<400> 120

Lys Thr Ile Thr Leu Glu Val Glu Pro Ser
1 5 10

<210> 121

<211> 12

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic
peptide sequence

<220>

<221> SITE

<222> (9)

<223> Xaa= cysteic acid

<400> 121

Val Glu Ala Leu Tyr Leu Val Cys Xaa Gly Glu Arg
1 5 10

<210> 122

<211> 11

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic
peptide sequence

<400> 122

Val Glu Ala Leu Tyr Leu Val Glu Gly Glu Arg
1 5 10

<210> 123

<211> 363

<212> PRT

<213> Homo sapiens

<220>

<223> galactosyltransferase

<400> 123

Met Ala Ser Lys Ser Trp Leu Asn Phe Leu Thr Phe Leu Cys Gly Ser
1 5 10 15

Ala Ile Gly Phe Leu Leu Cys Ser Gln Leu Phe Ser Ile Leu Leu Gly
20 25 30

Glu Lys Val Asp Thr Gln Pro Asn Val Leu His Asn Asp Pro His Ala
35 40 45

Arg His Ser Asp Asp Asn Gly Gln Asn His Leu Glu Gly Gln Met Asn
50 55 60

Phe Asn Ala Asp Ser Ser Gln His Lys Asp Glu Asn Thr Asp Ile Ala
65 70 75 80

Glu Asn Leu Tyr Gln Lys Val Arg Ile Leu Cys Trp Val Met Thr Gly
 85 90 95
 Pro Gln Asn Leu Glu Lys Lys Ala Lys His Val Lys Ala Thr Trp Ala
 100 105 110
 Gln Arg Cys Asn Lys Val Leu Phe Met Ser Ser Glu Glu Asn Lys Asp
 115 120 125
 Phe Pro Ala Val Gly Leu Lys Thr Lys Glu Gly Arg Asp Gln Leu Tyr
 130 135 140
 Trp Lys Thr Ile Lys Ala Phe Gln Tyr Val His Glu His Tyr Leu Glu
 145 150 155 160
 Asp Ala Asp Trp Phe Leu Lys Ala Asp Asp Asp Thr Tyr Val Ile Leu
 165 170 175
 Asp Asn Leu Arg Trp Leu Leu Ser Lys Tyr Asp Pro Glu Glu Pro Ile
 180 185 190
 Tyr Phe Gly Arg Arg Phe Lys Pro Tyr Val Lys Gln Gly Tyr Met Ser
 195 200 205
 Gly Gly Ala Gly Tyr Val Leu Ser Lys Glu Ala Leu Lys Arg Phe Val
 210 215 220
 Asp Ala Phe Lys Thr Asp Lys Cys Thr His Ser Ser Ser Ile Glu Asp
 225 230 235 240
 Leu Ala Leu Gly Arg Cys Met Glu Ile Met Asn Val Glu Ala Gly Asp
 245 250 255
 Ser Arg Asp Thr Ile Gly Lys Glu Thr Phe His Pro Phe Val Pro Glu
 260 265 270
 His His Leu Ile Lys Gly Tyr Leu Pro Arg Thr Phe Trp Tyr Trp Asn
 275 280 285
 Tyr Asn Tyr Tyr Pro Pro Val Glu Gly Pro Gly Cys Cys Ser Asp Leu
 290 295 300
 Ala Val Ser Phe His Tyr Val Asp Ser Thr Thr Met Tyr Glu Leu Glu
 305 310 315 320
 Tyr Leu Val Tyr His Leu Arg Pro Tyr Gly Tyr Leu Tyr Arg Tyr Gln
 325 330 335
 Pro Thr Leu Pro Glu Arg Ile Leu Lys Glu Ile Ser Gln Ala Asn Lys
 340 345 350
 Asn Glu Asp Thr Lys Val Lys Leu Gly Asn Pro
 355 360

<210> 124

<211> 405

<212> PRT

<213> Homo sapiens

<220>

<223> Homo sapiens sialyltransferase 1

<400> 124

Ile	His	Thr	Asn	Leu	Lys	Lys	Lys	Phe	Ser	Cys	Cys	Val	Leu	Val	Phe
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Leu	Leu	Phe	Ala	Val	Ile	Cys	Val	Trp	Lys	Glu	Lys	Lys	Lys	Gly	Ser
			20					25					30		
Tyr	Tyr	Asp	Ser	Phe	Lys	Leu	Gln	Thr	Lys	Glu	Phe	Gln	Val	Leu	Lys
		35					40					45			
Ser	Leu	Gly	Lys	Leu	Ala	Met	Gly	Ser	Asp	Ser	Gln	Ser	Val	Ser	Ser
	50					55					60				
Ser	Ser	Thr	Gln	Asp	Pro	His	Arg	Gly	Arg	Gln	Thr	Leu	Gly	Ser	Leu
65					70					75					80
Arg	Gly	Leu	Ala	Lys	Ala	Lys	Pro	Glu	Ala	Ser	Phe	Gln	Val	Trp	Asn
				85					90					95	
Lys	Asp	Ser	Ser	Ser	Lys	Asn	Leu	Ile	Pro	Arg	Leu	Gln	Lys	Ile	Trp
			100					105					110		
Lys	Asn	Tyr	Leu	Ser	Met	Asn	Lys	Tyr	Lys	Val	Ser	Tyr	Lys	Gly	Pro
		115					120					125			
Gly	Pro	Gly	Ile	Lys	Phe	Ser	Ala	Glu	Ala	Leu	Arg	Cys	His	Leu	Arg
	130					135					140				
Asp	His	Val	Asn	Val	Ser	Met	Val	Glu	Val	Thr	Asp	Phe	Pro	Phe	Asn
145					150					155					160
Thr	Ser	Glu	Trp	Glu	Gly	Tyr	Leu	Pro	Lys	Glu	Ser	Ile	Arg	Thr	Lys
				165					170					175	
Ala	Gly	Pro	Trp	Gly	Arg	Cys	Ala	Val	Val	Ser	Ser	Ala	Gly	Ser	Leu
			180					185					190		
Lys	Ser	Ser	Gln	Leu	Gly	Arg	Glu	Ile	Asp	Asp	His	Asp	Ala	Val	Leu
		195					200					205			
Arg	Phe	Asn	Gly	Ala	Pro	Thr	Ala	Asn	Phe	Gln	Gln	Asp	Val	Gly	Thr
	210					215						220			
Lys	Thr	Thr	Ile	Arg	Leu	Met	Asn	Ser	Gln	Leu	Val	Thr	Thr	Glu	Lys
225					230					235					240
Arg	Phe	Leu	Lys	Asp	Ser	Leu	Tyr	Asn	Glu	Gly	Ile	Leu	Ile	Val	Trp
				245					250					255	
Asp	Pro	Ser	Val	Tyr	His	Ser	Asp	Ile	Pro	Lys	Trp	Tyr	Gln	Asn	Pro
			260					265					270		
Asp	Tyr	Asn	Phe	Phe	Asn	Asn	Tyr	Lys	Thr	Tyr	Arg	Lys	Leu	His	Pro
		275					280					285			
Asn	Gln	Pro	Phe	Tyr	Ile	Leu	Lys	Pro	Gln	Met	Pro	Trp	Glu	Leu	Trp
	290					295					300				
Asp	Ile	Leu	Gln	Glu	Ile	Ser	Pro	Glu	Glu	Ile	Gln	Pro	Asn	Pro	Pro
305					310					315					320
Ser	Ser	Gly	Met	Leu	Gly	Ile	Ile	Ile	Met	Met	Thr	Leu	Cys	Asp	Gln
				325					330					335	

Val Asp Ile Tyr Glu Phe Leu Pro Ser Lys Arg Lys Thr Asp Val Cys
340 345 350

Tyr Tyr Tyr Gln Lys Phe Phe Asp Ser Ala Cys Thr Met Gly Ala Tyr
355 360 365

His Pro Leu Leu Tyr Glu Lys Asn Leu Val Lys His Leu Asn Gln Gly
370 375 380

Thr Asp Glu Asp Ile Tyr Leu Leu Gly Lys Ala Thr Leu Pro Gly Phe
385 390 395 400

Arg Thr Ile His Cys
405

<210> 125

<211> 518

<212> PRT

<213> Homo sapiens

<220>

<223> Homo sapiens aspartyl protease 1

<400> 125

Met Gly Ala Leu Ala Arg Ala Leu Leu Leu Pro Leu Leu Ala Gln Trp
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Leu Leu Arg Ala Ala Pro Glu Leu Ala Pro Ala Pro Phe Thr Leu Pro
20 25 30

Leu Arg Val Ala Ala Ala Thr Asn Arg Val Val Ala Pro Thr Pro Gly
35 40 45

Pro Gly Thr Pro Ala Glu Arg His Ala Asp Gly Leu Ala Leu Ala Leu
50 55 60

Glu Pro Ala Leu Ala Ser Pro Ala Gly Ala Ala Asn Phe Leu Ala Met
65 70 75 80

Val Asp Asn Leu Gln Gly Asp Ser Gly Arg Gly Tyr Tyr Leu Glu Met
85 90 95

Leu Ile Gly Thr Pro Pro Gln Lys Leu Gln Ile Leu Val Asp Thr Gly
100 105 110

Ser Ser Asn Phe Ala Val Ala Gly Thr Pro His Ser Tyr Ile Asp Thr
115 120 125

Tyr Phe Asp Thr Glu Arg Ser Ser Thr Tyr Arg Ser Lys Gly Phe Asp
130 135 140

Val Thr Val Lys Tyr Thr Gln Gly Ser Trp Thr Gly Phe Val Gly Glu
145 150 155 160

Asp Leu Val Thr Ile Pro Lys Gly Phe Asn Thr Ser Phe Leu Val Asn
165 170 175

Ile Ala Thr Ile Phe Glu Ser Glu Asn Phe Phe Leu Pro Gly Ile Lys
180 185 190

Trp Asn Gly Ile Leu Gly Leu Ala Tyr Ala Thr Leu Ala Lys Pro Ser
195 200 205

Ser Ser Leu Glu Thr Phe Phe Asp Ser Leu Val Thr Gln Ala Asn Ile
 210 215 220
 Pro Asn Val Phe Ser Met Gln Met Cys Gly Ala Gly Leu Pro Val Ala
 225 230 235 240
 Gly Ser Gly Thr Asn Gly Gly Ser Leu Val Leu Gly Gly Ile Glu Pro
 245 250 255
 Ser Leu Tyr Lys Gly Asp Ile Trp Tyr Thr Pro Ile Lys Glu Glu Trp
 260 265 270
 Tyr Tyr Gln Ile Glu Ile Leu Lys Leu Glu Ile Gly Gly Gln Ser Leu
 275 280 285
 Asn Leu Asp Cys Arg Glu Tyr Asn Ala Asp Lys Ala Ile Val Asp Ser
 290 295 300
 Gly Thr Thr Leu Leu Arg Leu Pro Gln Lys Val Phe Asp Ala Val Val
 305 310 315 320
 Glu Ala Val Ala Arg Ala Ser Leu Ile Pro Glu Phe Ser Asp Gly Phe
 325 330 335
 Trp Thr Gly Ser Gln Leu Ala Cys Trp Thr Asn Ser Glu Thr Pro Trp
 340 345 350
 Ser Tyr Phe Pro Lys Ile Ser Ile Tyr Leu Arg Asp Glu Asn Ser Ser
 355 360 365
 Arg Ser Phe Arg Ile Thr Ile Leu Pro Gln Leu Tyr Ile Gln Pro Met
 370 375 380
 Met Gly Ala Gly Leu Asn Tyr Glu Cys Tyr Arg Phe Gly Ile Ser Pro
 385 390 395 400
 Ser Thr Asn Ala Leu Val Ile Gly Ala Thr Val Met Glu Gly Phe Tyr
 405 410 415
 Val Ile Phe Asp Arg Ala Gln Lys Arg Val Gly Phe Ala Ala Ser Pro
 420 425 430
 Cys Ala Glu Ile Ala Gly Ala Ala Val Ser Glu Ile Ser Gly Pro Phe
 435 440 445
 Ser Thr Glu Asp Val Ala Ser Asn Cys Val Pro Ala Gln Ser Leu Ser
 450 455 460
 Glu Pro Ile Leu Trp Ile Val Ser Tyr Ala Leu Met Ser Val Cys Gly
 465 470 475 480
 Ala Ile Leu Leu Val Leu Ile Val Leu Leu Leu Leu Pro Phe Arg Cys
 485 490 495
 Gln Arg Arg Pro Arg Asp Pro Glu Val Val Asn Asp Glu Ser Ser Leu
 500 505 510
 Val Arg His Arg Trp Lys
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<210> 126

<211> 255
 <212> PRT
 <213> Homo sapiens

<220>
 <223> Homo sapiens syntaxin 6

<400> 126

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		20					25						30		
Gln	Asp	Pro	Ser	Thr	Ala	Thr	Arg	Glu	Glu	Ile	Asp	Trp	Thr	Thr	Asn
		35					40					45			
Glu	Leu	Arg	Asn	Asn	Leu	Arg	Ser	Ile	Glu	Trp	Asp	Leu	Glu	Asp	Leu
	50					55					60				
Asp	Glu	Thr	Ile	Ser	Ile	Val	Glu	Ala	Asn	Pro	Arg	Lys	Phe	Asn	Leu
65					70					75					80
Asp	Ala	Thr	Glu	Leu	Ser	Ile	Arg	Lys	Ala	Phe	Ile	Thr	Ser	Thr	Arg
				85					90					95	
Gln	Val	Val	Arg	Asp	Met	Lys	Asp	Gln	Met	Ser	Thr	Ser	Ser	Val	Gln
			100					105						110	
Ala	Leu	Ala	Glu	Arg	Lys	Asn	Arg	Gln	Ala	Leu	Leu	Gly	Asp	Ser	Gly
		115					120					125			
Ser	Gln	Asn	Trp	Ser	Thr	Gly	Thr	Thr	Asp	Lys	Tyr	Gly	Arg	Leu	Asp
	130					135					140				
Arg	Glu	Leu	Gln	Arg	Ala	Asn	Ser	His	Phe	Ile	Glu	Glu	Gln	Gln	Ala
145					150					155					160
Gln	Gln	Gln	Leu	Ile	Val	Glu	Gln	Gln	Asp	Glu	Gln	Leu	Glu	Leu	Val
				165					170					175	
Ser	Gly	Ser	Ile	Gly	Val	Leu	Lys	Asn	Met	Ser	Gln	Arg	Ile	Gly	Gly
			180					185					190		
Glu	Leu	Glu	Glu	Gln	Ala	Val	Met	Leu	Glu	Asp	Phe	Ser	His	Glu	Leu
		195					200					205			
Glu	Ser	Thr	Gln	Ser	Arg	Leu	Asp	Asn	Val	Met	Lys	Lys	Leu	Ala	Lys
	210					215					220				
Val	Ser	His	Met	Thr	Ser	Asp	Arg	Arg	Gln	Trp	Cys	Ala	Ile	Ala	Ile
225					230					235					240
Leu	Phe	Ala	Val	Leu	Leu	Val	Val	Leu	Ile	Leu	Phe	Leu	Val	Leu	
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<210> 127
 <211> 1728
 <212> DNA
 <213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: nucleic acid
encoding recombinant fusion protein

<400> 127

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<210> 128

<211> 575

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: recombinant
fusion protein sequence

<400> 128

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          20             25             30

Ala Ala Glu Ala Leu Gly Ala Ala Lys Lys Leu Gln Pro Ala Gln Thr
      35             40             45

Ala Ala Lys Asn Leu Ile Ile Phe Leu Gly Asp Gly Met Gly Val Ser
      50             55             60

Thr Val Thr Ala Ala Arg Ile Leu Lys Gly Gln Lys Lys Asp Lys Leu
      65             70             75             80

Gly Pro Glu Ile Pro Leu Ala Met Asp Arg Phe Pro Tyr Val Ala Leu
          85             90             95

Ser Lys Thr Tyr Asn Val Asp Lys His Val Pro Asp Ser Gly Ala Thr

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100					105					110					
Ala	Thr	Ala	Tyr	Leu	Cys	Gly	Val	Lys	Gly	Asn	Phe	Gln	Thr	Ile	Gly
		115					120					125			
Leu	Ser	Ala	Ala	Ala	Arg	Phe	Asn	Gln	Cys	Asn	Thr	Thr	Arg	Gly	Asn
	130					135					140				
Glu	Val	Ile	Ser	Val	Met	Asn	Arg	Ala	Lys	Lys	Ala	Gly	Lys	Ser	Val
145					150					155					160
Gly	Val	Val	Thr	Thr	Thr	Arg	Val	Gln	His	Ala	Ser	Pro	Ala	Gly	Thr
				165					170					175	
Tyr	Ala	His	Thr	Val	Asn	Arg	Asn	Trp	Tyr	Ser	Asp	Ala	Asp	Val	Pro
			180					185					190		
Ala	Ser	Ala	Arg	Gln	Glu	Gly	Cys	Gln	Asp	Ile	Ala	Thr	Gln	Leu	Ile
		195					200					205			
Ser	Asn	Met	Asp	Ile	Asp	Val	Ile	Leu	Gly	Gly	Gly	Arg	Lys	Tyr	Met
	210					215					220				
Phe	Pro	Met	Gly	Thr	Pro	Asp	Pro	Glu	Tyr	Pro	Asp	Asp	Tyr	Ser	Gln
225					230					235					240
Gly	Gly	Thr	Arg	Leu	Asp	Gly	Lys	Asn	Leu	Val	Gln	Glu	Trp	Leu	Ala
				245					250					255	
Lys	Arg	Gln	Gly	Ala	Arg	Tyr	Val	Trp	Asn	Arg	Thr	Glu	Leu	Met	Gln
			260					265					270		
Ala	Ser	Leu	Asp	Pro	Ser	Val	Thr	His	Leu	Met	Gly	Leu	Phe	Glu	Pro
		275					280					285			
Gly	Asp	Met	Lys	Tyr	Glu	Ile	His	Arg	Asp	Ser	Thr	Leu	Asp	Pro	Ser
	290					295					300				
Leu	Met	Glu	Met	Thr	Glu	Ala	Ala	Leu	Arg	Leu	Leu	Ser	Arg	Asn	Pro
305					310					315					320
Arg	Gly	Phe	Phe	Leu	Phe	Val	Glu	Gly	Gly	Arg	Ile	Asp	His	Gly	His
				325					330					335	
His	Glu	Ser	Arg	Ala	Tyr	Arg	Ala	Leu	Thr	Glu	Thr	Ile	Met	Phe	Asp
			340					345					350		
Asp	Ala	Ile	Glu	Arg	Ala	Gly	Gln	Leu	Thr	Ser	Glu	Glu	Asp	Thr	Leu
		355					360					365			
Ser	Leu	Val	Thr	Ala	Asp	His	Ser	His	Val	Phe	Ser	Phe	Gly	Gly	Tyr
	370					375					380				
Pro	Leu	Arg	Gly	Ser	Ser	Ile	Phe	Gly	Leu	Ala	Pro	Gly	Lys	Ala	Arg
385					390					395					400
Asp	Arg	Lys	Ala	Tyr	Thr	Val	Leu	Leu	Tyr	Gly	Asn	Gly	Pro	Gly	Tyr
			405						410					415	
Val	Leu	Lys	Asp	Gly	Ala	Arg	Pro	Asp	Val	Thr	Glu	Ser	Glu	Ser	Gly
			420					425					430		

Ser	Pro	Glu	Tyr	Arg	Gln	Gln	Ser	Ala	Val	Pro	Leu	Asp	Glu	Glu	Thr	435	440	445
His	Ala	Gly	Glu	Asp	Val	Ala	Val	Phe	Ala	Arg	Gly	Pro	Gln	Ala	His	450	455	460
Leu	Val	His	Gly	Val	Gln	Glu	Gln	Thr	Phe	Ile	Ala	His	Val	Met	Ala	465	470	475
Phe	Ala	Ala	Cys	Leu	Glu	Pro	Tyr	Thr	Ala	Cys	Asp	Leu	Ala	Pro	Pro	485	490	495
Ala	Gly	Thr	Thr	Asp	Ala	Ala	His	Pro	Gly	Asn	Tyr	Glu	Val	Glu	Pro	500	505	510
Arg	Arg	Ala	Leu	Tyr	Val	Glu	Gly	Glu	Arg	Gly	Phe	Phe	Tyr	Thr	Pro	515	520	525
Lys	Ala	Leu	Tyr	Leu	Val	Glu	Gly	Glu	Arg	Gly	Phe	Phe	Tyr	Thr	Ser	530	535	540
Leu	Met	Thr	Ile	Ala	Tyr	Val	Met	Ala	Ala	Ile	Cys	Ala	Leu	Phe	Met	545	550	555
Leu	Pro	Leu	Cys	Leu	Met	Val	Asp	Tyr	Lys	Asp	Asp	Asp	Asp	Lys		565	570	575

<210> 129
 <211> 5
 <212> PRT
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<220>
 <223> Description of Artificial Sequence: synthetic
 peptide sequence

<400> 129
 Lys Met Asp Ala Glu
 1 5

<210> 130
 <211> 5
 <212> PRT
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<220>
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 peptide sequence

<400> 130
 Gly Arg Arg Gly Ser
 1 5

<210> 131
 <211> 10
 <212> PRT
 <213> Artificial Sequence

<220>
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peptide sequence

<400> 131

Val Glu Ala Asn Tyr Glu Val Glu Gly Glu
1 5 10

<210> 132

<211> 10

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic
peptide sequence

<400> 132

Val Glu Ala Asn Tyr Ala Val Glu Gly Glu
1 5 10

<210> 133

<211> 10

<212> PRT

<213> Artificial Sequence

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<223> Description of Artificial Sequence: synthetic
peptide sequence

<400> 133

Lys Thr Ile Asn Leu Glu Val Glu Pro Ser
1 5 10

<210> 134

<211> 10

<212> PRT

<213> Artificial Sequence

<220>

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peptide sequence

<220>

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<400> 134

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<210> 135

<211> 10

<212> PRT

<213> Artificial Sequence

<220>

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 1 5 10

 <210> 136
 <211> 10
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 <222> (5)
 <223> Nle

 <220>
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 peptide sequence

 <400> 136
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 1 5 10

 <210> 137
 <211> 10
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 <213> Artificial Sequence

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 peptide sequence

 <400> 137
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 1 5 10

 <210> 138
 <211> 10
 <212> PRT
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 <220>
 <223> Description of Artificial Sequence: synthetic
 peptide sequence

 <400> 138
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 1 5 10

 <210> 139
 <211> 4
 <212> PRT
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<220>
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peptide sequence

<400> 139
Lys Met Asp Ala
1

<210> 140
<211> 4
<212> PRT
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<220>
<223> Description of Artificial Sequence: synthetic
peptide sequence

<400> 140
Ser Tyr Glu Val
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<210> 141
<211> 10
<212> PRT
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<220>
<223> Description of Artificial Sequence: synthetic
peptide sequence

<400> 141
Ser Glu Val Ser Tyr Glu Val Glu Phe Arg
1 5 10

<210> 142
<211> 4
<212> PRT
<213> Artificial Sequence

<220>
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peptide sequence

<400> 142
Asn Leu Asp Ala
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<210> 143
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
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peptide sequence

<400> 143
Ser Glu Val Ser Tyr Asp Ala Glu Phe Arg
1 5 10

<210> 144
<211> 10
<212> PRT
<213> Artificial Sequence

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peptide sequence

<400> 144
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1 5 10

<210> 145
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<220>
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<400> 145
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Glu Val Ser Tyr Glu Val Glu Phe Arg
20 25

<210> 146
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peptide sequence

<400> 146
Gly Leu Thr Asn Ile Lys Thr Glu Glu Ile Ser Glu Val Ser Tyr Glu
1 5 10 15
Val Glu Phe Arg
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<210> 147
<211> 15
<212> PRT
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<220>
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peptide sequence

<400> 147
Lys Thr Glu Glu Ile Ser Glu Val Ser Tyr Glu Val Glu Phe Arg
1 5 10 15

<210> 148
 <211> 10
 <212> PRT
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 <220>
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 peptide sequence

 <400> 148
 Thr Glu Val Ser Tyr Glu Val Glu Phe Arg
 1 5 10

 <210> 149
 <211> 10
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 peptide sequence

 <400> 149
 Ser Glu Val Asp Tyr Glu Val Glu Phe Arg
 1 5 10

 <210> 150
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 <210> 151
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 <400> 151
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 1 5 10

 <210> 152
 <211> 10
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peptide sequence

<400> 152

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1 5 10

<210> 153

<211> 10

<212> PRT

<213> Artificial Sequence

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<223> Description of Artificial Sequence: synthetic
peptide sequence

<400> 153

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1 5 10

<210> 154

<211> 13

<212> PRT

<213> Artificial Sequence

<220>

<221> SITE

<222> (11)

<223> Xaa=tryptophan

<220>

<223> Description of Artificial Sequence: synthetic
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<400> 154

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1 5 10

<210> 155

<211> 18

<212> PRT

<213> Artificial Sequence

<220>

<221> SITE

<222> (16)

<223> Xaa=tryptophan

<220>

<223> Description of Artificial Sequence: synthetic
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1 5 10 15

Lys Lys

<210> 156

<211> 23

<212> PRT
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 <220>
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 <223> Xaa=tryptophan

 <220>
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 peptide sequence

 <400> 156
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 1 5 10 15

 Glu Phe Arg Xaa Lys Lys
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 <210> 157
 <211> 28
 <212> PRT
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 <220>
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 peptide sequence

 <220>
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 <222> (26)
 <223> Xaa=tryptophan

 <400> 157
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 1 5 10 15

 Glu Ile Ser Tyr Glu Val Glu Phe Arg Xaa Lys Lys
 20 25

 <210> 158
 <211> 13
 <212> PRT
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 <223> Xaa=tryptophan

 <220>
 <223> Description of Artificial Sequence: synthetic
 peptide sequence

 <400> 158
 Ser Glu Ile Ser Tyr Glu Val Glu Phe Arg Xaa Lys Lys
 1 5 10

 <210> 159
 <211> 18

<212> PRT
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peptide sequence

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<400> 159
Lys Thr Glu Glu Ile Ser Glu Ile Ser Tyr Glu Val Glu Phe Arg
1 5 10 15

Xaa Lys Lys

<210> 160
<211> 23
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<220>
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peptide

<400> 160
Gly Leu Thr Asn Ile Lys Thr Glu Glu Ile Ser Glu Ile Ser Tyr
1 5 10 15

Glu Val Glu Phe Arg Xaa Lys Lys
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<210> 161
<211> 28
<212> PRT
<213> Artificial Sequence

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<223> Xaa=tryptophan

<220>
<223> Description of Artificial Sequence: synthetic
peptide sequence

<400> 161
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1 5 10 15

Ser Glu Ile Ser Tyr Glu Val Glu Phe Arg Xaa Lys Lys
20 25

<210> 162
<211> 13
<212> PRT
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<223> Xaa=oregon green

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<400> 162
Ser Glu Ile Ser Tyr Glu Val Glu Phe Arg Xaa Lys Lys
1 5 10

<210> 163
<211> 18
<212> PRT
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<220>
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<223> Xaa=oregon green

<220>
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peptide sequence

<400> 163
Lys Thr Glu Glu Ile Ser Glu Ile Ser Tyr Glu Val Glu Phe Arg Xaa
1 5 10 15

Lys Lys

<210> 164
<211> 23
<212> PRT
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<220>
<221> SITE
<222> (21)
<223> Xaa=oregon green

<220>
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peptide sequence

<400> 164
Gly Leu Thr Asn Ile Lys Thr Glu Glu Ile Ser Glu Ile Ser Tyr Glu
1 5 10 15

Val Glu Phe Arg Xaa Lys Lys
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<210> 165
<211> 28
<212> PRT
<213> Artificial Sequence

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<223> Xaa=oregon green

<220>
<223> Description of Artificial Sequence: synthetic peptide sequence

<400> 165
Thr Arg Pro Gly Ser Gly Leu Thr Asn Ile Lys Thr Glu Glu Ile Ser
1 5 10 15

Glu Ile Ser Tyr Glu Val Glu Phe Arg Xaa Lys Lys
20 25

<210> 166
<211> 13
<212> PRT
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<223> Xaa=oregon green

<220>
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peptide sequence

<400> 166
Ser Glu Ile Ser Tyr Glu Val Glu Phe Arg Xaa Lys Lys
1 5 10

<210> 167
<211> 18
<212> PRT
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<400> 167
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1 5 10 15

Xaa Lys Lys

<210> 168
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<400> 168
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1 5 10 15
Glu Val Glu Phe Arg Xaa Lys Lys
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<210> 169
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Thr Arg Pro Gly Ser Gly Leu Thr Asn Ile Lys Thr Glu Glu Ile
1 5 10 15
Ser Glu Ile Ser Tyr Glu Val Glu Phe Arg Xaa Lys Lys
20 25

<210> 170
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peptide sequence

<400> 170
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1 5 10

<210> 171
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 primer for site-directed mutagenesis of APP

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 <212> DNA
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 primer for site-directed mutagenesis of APP

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 primer for site-directed mutagenesis of APP

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 primer for site-directed mutagenesis of APP

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 primer for site-directed mutagenesis of APP

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48

<210> 177
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<400> 177
Val Ser Tyr Glu Val
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<210> 178
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<400> 178
Val Ser Tyr Asp Ala
1 5

<210> 179
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1 5

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 MBPC125-SYEV

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 primer for generating mutant construct named
 MBPC125-SYEV

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<400> 185
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 <400> 186
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 <211> 4
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 <400> 187
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 <210> 188
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 <400> 188
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 <210> 189
 <211> 5
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 <400> 189
 Val Ser Tyr Glu Ala
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 <210> 190
 <211> 13
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<223> Description of artificial sequence: synthetic peptide sequence

<400> 190

Ser Glu Ile Ser Tyr Glu Val Glu Phe Arg Trp Lys Lys
1 5 10

<210> 191

<211> 23

<212> PRT

<213> Artificial sequence

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<223> Description of artificial sequence: synthetic peptide sequence

<400> 191

Gly Leu Thr Asn Ile Lys Thr Glu Glu Ile Ser Glu Ile Ser Tyr Glu
1 5 10 15

Val Glu Phe Arg Trp Lys Lys
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<210> 192

<211> 15

<212> PRT

<213> Artificial sequence

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<223> Description of artificial sequence: synthetic peptide sequence

<220>

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<222> (1)..(1)

<223> amino acid at position 1 is biotinylated

<220>

<221> SITE

<222> (14)..(14)

<223> cys at position 14 is derivatized with an oregon green

<400> 192

Lys	Glu	Ile	Ser	Glu	Ile	Ser	Tyr	Glu	Val	Glu	Phe	Arg	Lys	Lys
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<210> 193

<211> 22

<212> PRT

<213> Artificial sequence

<220>

<223> Description of artificial sequence: synthetic peptide sequence

<220>

<221> SITE

<222> (1)..(1)

<223> amino acid at position 1 is biotinylated

<220>

<221> SITE

<222> (21)..(21)

<223> cys at position 21 is derivatized with an oregon green

<400> 193

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1				5				10						15	
Val	Glu	Phe	Arg	Lys	Lys										
			20												

<210> 194

<211> 6806

<212> DNA

<213> Artificial sequence

<220>

<223> Description of artificial sequence: synthetic DNA sequence

<400> 194

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<220>

<223> Description of artificial sequence: synthetic peptide sequence

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<221> MOD_RES

<222> (1)..(1)

<223> ACETYLATION (MCA)

<220>

<221> SITE

<222> (11) .. (11)

<223> 2,4-dinitrophenyl group after the Lys at position 11

<400> 195

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<210> 196

<211> 12

<212> PRT

<213> Artificial sequence

<220>

<223> Description of artificial sequence: synthetic peptide sequence

<220>

<221> SITE

<222> (4) .. (4)

<223> amino acid at position 4 has been derivatized with a statine

<400> 196

Ser Glu Val Asn Val Ala Glu Phe Arg Gly Gly Cys
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<210> 197

<211> 10

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<213> synthetic peptide sequence

<220>

<221> SITE

<222> (4) .. (4)

<223> amino acid at position 4 has been derivatized with a statine

<220>

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<222> (10)..(10)

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<210> 198

<211> 2043

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